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(71)Applicant : TATSUUMA HONKE BREWING CO LTD

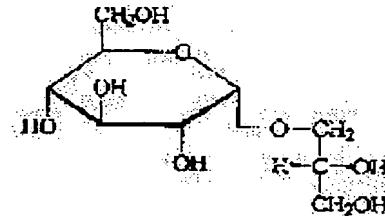
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(72)Inventor : IMAMURA TAKESHI
UCHIYAMA HIROBUMI
TAKENAKA FUMITO

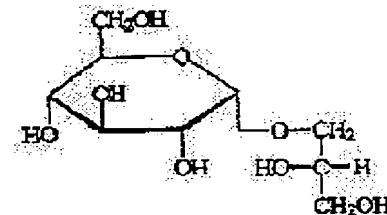
(54) ALPHA-D-GLUCOPYRANOSYLGLYCEROL COMPOUNDS, PRODUCTION THEREOF AND USE THEREOF

(57)Abstract:

PROBLEM TO BE SOLVED: To obtain new α -D-glucopyranosylglycerol compounds having clear sweetness, having extremely low browning property and Maillard reactivity, and further having functions such as excellent thermal stability, large digestion resistance, good dental caries resistance and high moisture retainability and useful as foods, chemicals and medicines.



SOLUTION: The objective compounds are expressed by formulas I and II. These compounds are obtained by allowing α -glucosidase originated from a fungus such as Asp. Niger to act on a saccharide preferably comprising maltose, etc., and glycerol preferably in a 10–50 wt./vol.% glycerol solution and subsequently separating and purifying the reaction product preferably by aminocolumn chromatography. The action is preferably performed at a pH of 3–6 at 40° C for 24 hr, when the concentration of the glycerol is, for example, 37.5 wt./vol.%. It is sufficient that the α -glucosidase is added in an amount of 2.5 U per g of the saccharide, when, for example, a 5 wt./vol.% maltose solution is used as the saccharide.



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